

The equation of state,  $T_c$  and charge fluctuations in finite temperature QCD

I will present results obtained by the HotQCD collaboration (which I co-lead) on the calculation of the equation of state of QCD at finite temperature and the extraction of chiral and deconfining properties of the theory close to the transition temperature  $T_c$ . The talk will also cover results on fluctuations of baryon and electric charges near the transition and their signatures in experiments being conducted at Brookhaven Lab and at CERN.